

**AMENDMENTS TO THE CLAIMS**

Please amend claims 5-9, such that the status of the claims is as follows:

1. (Original) An accelerator comprising a plurality of accelerating cells arranged to convey a beam, adjacent cells being linked by a coupling cell, the coupling cells being arranged to dictate the ratio of electric field in the respective adjacent accelerating cells, at least one coupling cell being variable to allow a range of ratios including positive values and negative values.

2. (Original) An accelerator according to claim 1 in which the at least one coupling cell is variable smoothly from a positive value to a negative value.

3. (Previously presented) An accelerator according to claim 1, in which the beam is relativistic over substantially the length of the accelerator.

4. (Previously presented) An accelerator according to claim 1, in which the variable coupling cell comprises a cavity containing a conductive element rotatable about an axis transverse to the beam axis.

5. (Currently Amended) A method for manufacturing an accelerator to convey a beam, the method comprising:

~~The use of an accelerator in which~~ arranging a plurality of accelerating cells ~~are arranged to convey a beam; and~~

linking, and adjacent cells ~~are linked~~ by a coupling cell, the coupling cells being arranged to dictate the ratio of electric field in the respective adjacent accelerating cells, at least one coupling cell being variable to allow a range of ratios including positive values and negative values.

6. (Currently Amended) ~~The method Use~~ according to claim 5 in which the at least one coupling cell is variable to allow a smooth change of ratios smoothly from a positive value to a negative value.

7. (Currently Amended) ~~An operating~~ A method for operating an accelerator, comprising:  
in which providing a plurality of accelerating cells are arranged to convey a beam,  
and wherein adjacent cells are linked by a coupling cell, the coupling cells  
being arranged to dictate the ratio of electric field in the respective adjacent  
accelerating cells; and  
varying at least one coupling cell ~~being variable~~ to allow a range of ratios including  
positive values and negative values.

8. (Currently Amended) The method of claim 7 ~~in which, further comprising:~~  
varying the at least one coupling cell ~~is variable~~ smoothly from a positive value to a  
negative value.

9. (Currently Amended) ~~The use of an accelerator according to claim 1;~~ The method of claim 7,  
further comprising:  
for taking kilovoltage portal images with the conveyed beam.

10 (canceled)